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CARD TRIMMER

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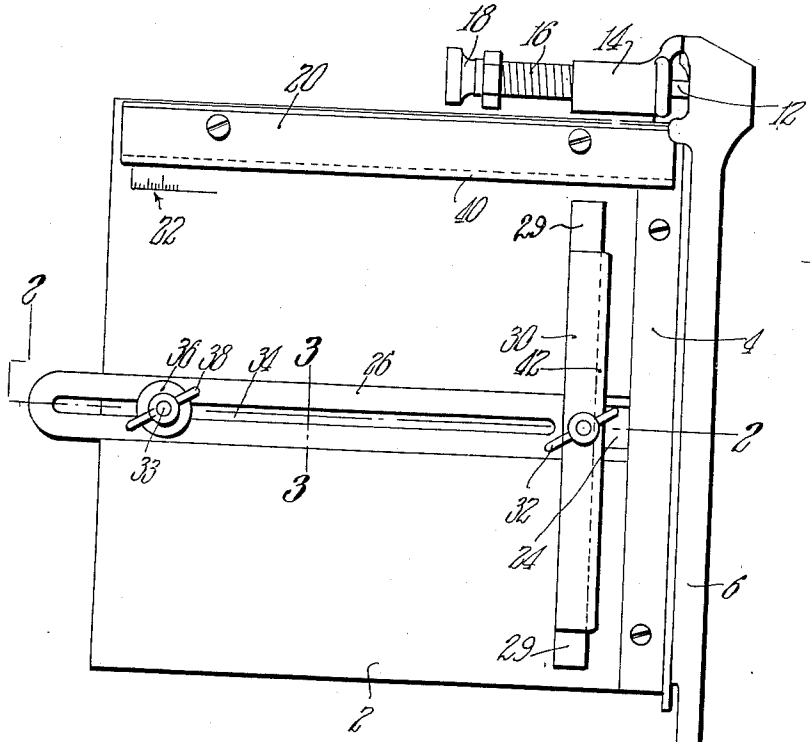
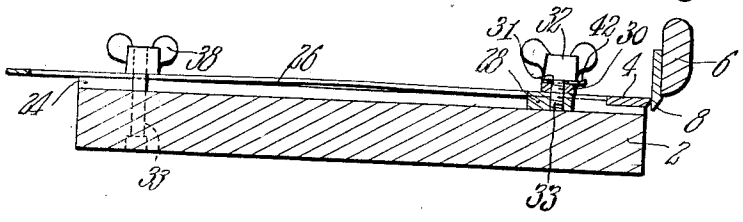


Fig. 1.

Fig. 2.



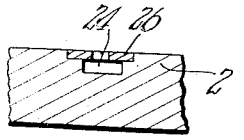


Fig. 3.

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CARD TRIMMER

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3 Claims. (Cl. 164—44)

This invention relates to improvements in card trimmers and is directed more particularly to an improved cutting or trimming apparatus for cards, paper, or the like, of the type which includes a knife pivoted to a blade-carrying support.

It is one of the principal objects of the invention to provide a card trimmer having both a stationary straight edge and a pivoted straight edge, the latter being swingable to various angular positions relative to the former. As a special feature, the construction includes means whereby the pivoted member may be releasably fixed in adjusted position.

It is another object of the invention to provide a device of the type referred to where the straight edge or edges is so novelly formed, and the construction is such, that the cards, paper, or other sheet material being worked upon are accurately held in desired position. As will appear, the construction of the invention is simple and economical to manufacture and more efficient and positive in operation than other devices known in the art.

Still another object of the invention is to provide a paper-cutter or trimmer having a straight-edge member which is movable towards and away from the cutting blade to facilitate the trimming or cutting of cards or sheets of different widths. A special feature of the arrangement is that this longitudinally movable member may be furthermore pivoted, preferably intermediate its ends, for assuming various angular positions relative to the plane of the cutting blade relative to which it is movable.

With the foregoing and various other novel features and advantages and other objects of my invention as will become more apparent as the description proceeds, the invention consists in certain novel features of construction and in the combination and arrangement of parts as will be hereinafter more particularly pointed out in the claims hereunto annexed and more fully described and referred to in connection with the accompanying drawing wherein:

Fig. 1 is a plan view of a device embodying the features of the invention;

Fig. 2 is a sectional view on the line 2—2 of Fig. 1; and

Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Referring now to the drawing more in detail, wherein similar reference figures refer to like parts, and referring more particularly to the preferred form of my invention which has been selected for illustrative purposes, I have shown a support member indicated by 2. This may take various forms, shapes and sizes, and may be constructed of any suitable material but preferably consists of a flat-surfaced member of some rigid material, such as wood or metal.

Associated with the member 2 adjacent one marginal edge thereof is a substantially straight cutting blade or knife 4. A movable knife member 6 is provided for moving into and out of shearing relation with the knife 4, which is stationary.

The movable knife 6 has a cutting edge 8 and it may have a handle 10. It may be pivotally associated with the support in various ways, said pivoted arrangement not being a particular part of this invention, but the member 6 is shown as having a shaft 12 rotatable in a bracket 14 carried by the base 2 with a spring 16 around the shaft and between the bracket and an enlarged part 18 for urging the knife inwardly towards the blade.

Associated with the upper side of the base 2 is a straight-edge member 20 which preferably extends along a marginal edge of the base and at substantially right angles to the blade 4. There may or may not be a plurality of rule lines 22 adjacent the member 20.

The upper side of the support is provided with a longitudinal slot 24 preferably having a lower portion of less width than its upper portion as shown in Fig. 3. The upper portion is adapted to receive a slidable member 26 while the lower portion may receive a leg-like or lug part 28 secured to the lower side of member 26 at one end thereof.

Thus it will be seen that the member 26 may be accurately guided in its sliding movements. Preferably the slide 26 and, of course, the slot 24 extend in parallelism with straight edge 20 and, consequently, at right angles to member 4.

The forward end portion of the slide 26 carries what might be called an auxiliary straight edge 29. In Fig. 1, this member 29 is shown as being parallel to blade 4 and, of course, knife 6 but preferably said member is arranged for swinging movements to various angular positions relative to blade 4, and, therefore, also relative to member 20. A plate-like member 30 fixed on top of member 29 has a forwardly extending lip 42.

A wing-nut 32 has a screw-threaded stem 33 fixed thereto which extends through members 30 and 31 and is in engagement with the member 28 secured to the underside of slide 26. Loosen-

ing of the screw will, of course, permit the member 30 to be swung to various angular positions and tightening of the wing-nut will firmly hold said member in the adjusted position desired.

It has been found desirable to form the slide member of a flat strip of metal and to have it normally bowed as shown so that when downward pressure is applied to the slide, the straight edge 29 is urged down onto the upper surface of the board 2. This is so that the card, paper, or other sheet when placed against the straight edge will not slip thereunder but will be accurately located.

There is also preferably provided an upstanding pin 33 fixed in the slot 24 of the support and this extends upwardly through a longitudinal slot 34 provided in member 26. There may be a washer 36 around the pin 33 on top of the member 26 and a wing-nut 38 threadedly engages the upper end of the pin.

Tightening of the nut brings pressure against the slide and not only serves to hold it against sliding movement relative to the support, but also may serve to unbow it as above described. Of course, loosening of the nut permits the slide to be moved to vary the distance between the straight edge 29 and the blade 4.

As will be appreciated, when using the device, the operator raises the knife 6 and places the card on the base 2 up against the straight edge 20 or 29, or both. To assure that the card does not slip or lift upwardly, there may be provided lip members on the straight edges, such as 40 on member 20 and 42 on member 29. These lips are spaced slightly above the upper surface of the board and, of course, provide recesses for marginal edges of the card.

Manifestly the specific details of construction may be considerably varied from those herein shown and described without involving any departure from the principle of the invention or sacrificing any of the advantages inherent therein. While I have described my invention in this specification in great detail and particularly with respect to the present preferred form thereof, it is not desired to be limited thereto since many changes and modifications may be made therein without departing from the spirit and scope of the invention.

The invention may be embodied in other specific forms without departing from the essential characteristics thereof. Hence, the present embodiments are therefore to be considered in all respects merely as being illustrative and not as being restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all modifications and variations as fall within the meaning and purview and range of equivalency of the appended claims are therefore intended to be embraced therein.

What it is desired to claim and secure by Letters Patent of the United States is:

1. A card trimmer of the class described comprising in combination, a flat support member having associated therewith a straight stationary blade and a pivoted knife adapted for co-acting shearing relationship, said support being provided with a longitudinal slot in its upper side extending substantially at right angles to said blade, a member slidable in said slot, and a straight edge member pivoted to said slidable member for swinging to various angular positions relative to said blade, means for releasably fixing said pivoted straight edge in desired angular position, and guide means for said slidable member including an upstanding pin in said slot in releasable engagement with said slidable member.

2. A card trimmer of the class described comprising in combination, a flat support member having associated therewith a straight stationary blade and a pivoted knife adapted for co-acting shearing relationship, said support being provided with a longitudinal slot in its upper side extending substantially at right angles to said blade, a member slidable in said slot, and a straight edge member pivoted to said slidable member for swinging to various angular positions relative to said blade, and means for releasably fixing said pivoted straight edge in desired angular position, said slidable member being normally bowed, and means for bringing pressure on said slidable member to unbow it and bring said straight edge member flush against the upper surface of the support.

3. A card trimmer of the class described comprising in combination, a flat support member having associated therewith a straight stationary blade and a pivoted knife adapted for co-acting shearing relationship, said support being provided with a longitudinal slot in its upper side extending substantially at right angles to said blade, a member slidable in said slot and provided with a longitudinal slot, a straight edge member pivoted to said slidable member for swinging to various angular positions relative to said blade, means for releasably fixing said pivoted straight edge in desired angular position, an upstanding pin in said slot in the support extending upwardly through the slot in the slidable member, the upper end portion of said pin being screw-threaded, and a nut in screw-threaded engagement with the upper end portion of the pin.

WILLIAM H. FORD.